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Cc: [ANDERSON Jim M](#)
Subject: Portland Harbor - Preliminary breastmilk calculations
Date: 11/21/2005 03:26 PM
Attachments: [PH HH Breast Milk Approach 2.doc](#)

I've attached a memo showing my draft evaluation of potential risks to infants from consuming PCBs in breast milk as a result of maternal exposure from eating contaminated fish. This is for EPA/partners internal review as we decide how to proceed with this pathway on the Portland Harbor project. Please check over my calculations.

Marcia, I've included you at Dana's suggestion because I could not duplicate the Cmilkgfat calculation performed for the GE/Housatonic site. My calculations are higher by a factor of 11. The calculation seems fairly straightforward, and I don't see where the error is. One possibility is that they multiplied by f2 (= 0.3) rather than divided by f2, which would result in a concentration 11 times lower than what it should be. But that's speculation on my part. I'm hoping I'm wrong, and that the resulting risks are lower than what I've calculated. My calculation of maternal body burden (based on Cmilkgfat = Clipid) seems high, but I don't see an error.

My conclusion based on these preliminary calculations is that it is feasible to include exposure to breast milk in the Portland Harbor inwater risk assessment, and that this is an important exposure pathway. Let's discuss this during our conference call Wednesday morning.

- Mike